Set S1	Items Description 499324 (INTEGRAT?()CIRCUIT? OR ICCHIP? OR (MICROPROCESSOR? OR MIC-	
	RO OR IC OR COMPUTER? OR SEMICONDUCTOR?) () CHIP? ? OR CIRCUIT? OR IC OR CHIP? ?) (3N) (DEVICE? OR MECHANISM? OR UNIT? ? OR CAR-	
S3	D? ? OR CONTROLLER? OR APPARAT? OR ADAPTER? OR MODULE?) 84215 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-	
,	NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS? OR DISCOVER?)(5N)(DEGRAD? OR WEAK??? OR WEAKEN? OR DECAY? OR	
	CORROD? OR IMPAIR? OR FAIL??? OR DETERIOR? OR DISINTEGRAT? OR WEAR???(1W)TEAR???)	
S4	1926 S1(7N)((SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT? OR INTELLIGENT?)(3N)(MONITOR? OR REGULAT? OR TEST??? OR CHEC- K? OR DIAGNOS? OR DETERMIN? OR ASSESS? OR DETECT?))	
S5	84215 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-	
	NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS?  OR DISCOVER?) (5N) (DEGRAD? OR WEAK??? OR WEAKEN? OR DECAY? OR  CORROD? OR IMPAIR? OR FAIL??? OR DETERIOR? OR DISINTEGRAT? OR  WEAR???(1W)TEAR???)	
S6	114724 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-	
	NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS? OR DISCOVER?) (5N) (DEGRAD? OR WEAK OR WEAKEN? OR DECREAS? OR DECREMEN? OR LESSEN? OR LOWER? OR WORSE? OR SLOWER?)	
s7	497 S1(7N)((SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT? OR INTELLIGENT?)(2N)(REPAIR? OR FIX OR FIXE? ? OR FIXING OR -	
	PATCH? OR RESTOR? OR CORRECT? OR DEBUG? OR DE()BUG? ? OR REST-	
S8	OR? OR REBUIL? OR ADJUST? OR MODIF?)) 50198 (ACCEPTAB? OR REASONAB? OR SATISFACTOR? OR ADMISSAB? OR PA-	
	SSAB? OR PASS??? OR TOLER? OR ADEQUAT? OR SUFFICIENT?) (5N) (TH-RESHOLD? OR THRESHHOLD? OR BORDER? OR BOUNDAR??? OR LIMIT? OR RANG???)	
? ds;s	chow files; logoff hold	
Set	Items Description	
S1	499324 (INTEGRAT?()CIRCUIT? OR ICCHIP? OR (MICROPROCESSOR? OR MIC-RO OR IC OR COMPUTER? OR SEMICONDUCTOR?)()CHIP? ? OR CIRCUIT?	
	OR IC OR CHIP? ?) (3N) (DEVICE? OR MECHANISM? OR UNIT? ? OR CAR-	
s3	D? ? OR CONTROLLER? OR APPARAT? OR ADAPTER? OR MODULE?) 84215 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-	
	NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS? OR DISCOVER?) (5N) (DEGRAD? OR WEAK??? OR WEAKEN? OR DECAY? OR	
	CORROD? OR IMPAIR? OR FAIL??? OR DETERIOR? OR DISINTEGRAT? OR	
S4	WEAR???(1W)TEAR???) 1926 S1(7N)((SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT?	,
	OR INTELLIGENT?) (3N) (MONITOR? OR REGULAT? OR TEST??? OR CHEC-	
S5	K? OR DIAGNOS? OR DETERMIN? OR ASSESS? OR DETECT?)) 84215 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-	
	NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS? OR DISCOVER?) (5N) (DEGRAD? OR WEAK??? OR WEAKEN? OR DECAY? OR	
	CORROD? OR IMPAIR? OR FAIL??? OR DETERIOR? OR DISINTEGRAT? OR	
S6	WEAR???(1W)TEAR???) 114724 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-	
	NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS?	)
	OR DISCOVER?) (5N) (DEGRAD? OR WEAK OR WEAKEN? OR DECREAS? OR - DECREMEN? OR LESSEN? OR LOWER? OR WORSE? OR SLOWER?)	
<sub>.</sub> S7	497 S1(7N)((SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT? OR INTELLIGENT?)(2N)(REPAIR? OR FIX OR FIXE? ? OR FIXING OR -	
	PATCH? OR RESTOR? OR CORRECT? OR DEBUG? OR DE()BUG? ? OR REST-	

OR? OR REBUIL? OR ADJUST? OR MODIF?))

50198 (ACCEPTAB? OR REASONAB? OR SATISFACTOR? OR ADMISSAB? OR PA-SSAB? OR PASS??? OR TOLER? OR ADEQUAT? OR SUFFICIENT?) (5N) (TH-RESHOLD? OR THRESHHOLD? OR BORDER? OR BOUNDAR??? OR LIMIT? OR RANG???)

File 350:Derwent WPIX 1963-2008/UD=200807

(c) 2008 The Thomson Corporation

File 347: JAPIO Dec 1976-2007/Sep (Updated 080116)

(c) 2008 JPO & JAPIO

30jan08 12:18:23 User276825 Session D1110.2

```
Set
        Items
                Description
S1
         7473
                (UPCONVERT? OR UP()CONVERT? OR (INCREAS? OR
HIGH???) (2N) CO-
             NVER? OR (CONVER? OR MODIF? OR ALTER? OR
CHANG?) (2N) FREQUEN?) -
             (5N) SIGNAL?
S2
        67615
                (REFEREN? OR COMPAR? OR PRIMARY OR BENCHMARK? OR
EXAMPL?) (-
             3N) SIGNAL?
                S2(5N)(GENERAT? OR PRODUC? OR CREATE? ? OR CREATING? OR
S3
         6199
CR-
             EATION? OR MADE? OR DEVELOP? OR YIELD? OR ORIGINAT? OR
MAKE? -
             OR MAKING? OR INITIAT? OR INTRODUC? OR MANUFACT?)
S4
         1040
                (TEST??? OR CHECK? OR DIAGNOS? OR TROUBLE? OR EXAMIN?
OR A-
             NALY?) (7N) ((TELECOMM? OR COMMUNICATION?) (2N) (TRANSCEIVER?
OR -
             RECEIVER?))
        99890 QUADRATUR?(2N)(FREQUEN? OR MODULAT?) OR PHASE?
?(2N)MODULA-
             T?
           25
S6
                S1 AND S3
S7
          321
                S1 AND S5
S8
           11
                S7 AND S2
S9
           35
                S6 OR S8
S10
           31
                RD
                   (unique items)
S11
           0
                S1 AND S2:S3 AND S4 AND S5
S12
           19
                S10 AND PY=1978:2004
S13
            0
                S7 AND S4
S14
            0
                S1 AND S2 AND S4
File
       2:INSPEC 1898-2008/Dec W5
         (c) 2008 Institution of Electrical Engineers
       6:NTIS 1964-2008/Jan W4
File
         (c) 2008 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1884-2008/Jan W2
File
         (c) 2008 Elsevier Eng. Info. Inc.
      34:SciSearch(R) Cited Ref Sci 1990-2008/Jan W3
File
         (c) 2008 The Thomson Corp
File
      35:Dissertation Abs Online 1861-2007/Oct
         (c) 2007 ProQuest Info&Learning
      56: Computer and Information Systems Abstracts 1966-2008/Dec
File
         (c) 2008 CSA.
File
      60:ANTE: Abstracts in New Tech & Engineer 1966-2008/Dec
         (c) 2008 CSA.
File
      62:SPIN(R) 1975-2008/Jan W1
         (c) 2008 American Institute of Physics
      65:Inside Conferences 1993-2008/Jan 25
File
         (c) 2008 BLDSC all rts. reserv.
File 95:TEME-Technology & Management 1989-2008/Jan W2
         (c) 2008 FIZ TECHNIK
File 99: Wilson Appl. Sci & Tech Abs 1983-2007/Nov
         (c) 2007 The HW Wilson Co.
File 111:TGG Natl.Newspaper Index(SM) 1979-2008/Jan 10
         (c) 2008 The Gale Group
File 144:Pascal 1973-2008/Jan W2
         (c) 2008 INIST/CNRS
```

File 239:Mathsci 1940-2008/Feb

(c) 2008 American Mathematical Society

File 256:TecInfoSource 82-2008/Oct

(c) 2008 Info.Sources Inc

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec

(c) 2006 The Thomson Corp

File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13

(c) 2002 The Gale Group

Set Items Description 499324 (INTEGRAT?()CIRCUIT? OR ICCHIP? OR (MICROPROCESSOR? OR S1 MIC-RO OR IC OR COMPUTER? OR SEMICONDUCTOR?)()CHIP? ? OR CIRCUIT? OR IC OR CHIP? ?) (3N) (DEVICE? OR MECHANISM? OR UNIT? ? OR CAR-D? ? OR CONTROLLER? OR APPARAT? OR ADAPTER? OR MODULE?) 1926 S1(7N)((SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR S2 INTUIT? OR INTELLIGENT?) (3N) (MONITOR? OR REGULAT? OR TEST??? OR CHEC-K? OR DIAGNOS? OR DETERMIN? OR ASSESS? OR DETECT?)) S3 84215 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS? OR DISCOVER?) (5N) (DEGRAD? OR WEAK??? OR WEAKEN? OR DECAY? OR CORROD? OR IMPAIR? OR FAIL??? OR DETERIOR? OR DISINTEGRAT? OR WEAR???(1W) TEAR???) (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? S4 114724 OR A-NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS? OR DISCOVER?) (5N) (DEGRAD? OR WEAK OR WEAKEN? OR DECREAS? OR -DECREMEN? OR LESSEN? OR LOWER? OR WORSE? OR SLOWER?) S1(7N)((SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR S5 497 INTUIT? OR INTELLIGENT?) (2N) (REPAIR? OR FIX OR FIXE? ? OR FIXING OR -PATCH? OR RESTOR? OR CORRECT? OR DEBUG? OR DE()BUG? ? OR REST-OR? OR REBUIL? OR ADJUST? OR MODIF?)) 50198 (ACCEPTAB? OR REASONAB? OR SATISFACTOR? OR ADMISSAB? OR S6 PA-SSAB? OR PASS??? OR TOLER? OR ADEQUAT? OR SUFFICIENT?) (5N) (TH-RESHOLD? OR THRESHHOLD? OR BORDER? OR BOUNDAR??? OR LIMIT? OR RANG???) S7 S2 AND S5 AND S6 (SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT? OR S8 42658 IN-TELLIGENT?) (2N) (MONITOR? OR REGULAT? OR TEST??? OR CHECK? OR -DIAGNOS? OR DETERMIN? OR ASSESS? OR DETECT?) (3N) (DEVICE? OR M-ECHANISM? OR UNIT? ? OR CARD? ? OR CONTROLLER? OR APPARAT? OR -ADAPTER? OR MODULE?) S8(5N)(AFFIX? OR EMBED? OR CONNECT? OR LINK??? OR S9 11217 ATTACH? -OR LOCAT? OR POSIT? OR HAS OR CONTAIN? OR INCLU?) 1500 S1 AND S9 S10

```
415
                S10 AND CONTROLLER?
S12
          84
                S11 AND COMPAR?
S13
           10
                S12 AND S3:S4
S14
           9
                S13 NOT S7
S15
          68
                S10 AND (SELFTEST? OR SELF() TEST??? OR SELFCHECK? OR
SELF(-
            ) CHECK?) (2N) CONTROLLER?
                S15 AND S3:S4
S16
                S16 NOT (S7 OR S14)
S17
           6
S18
          119
                S1 AND S3:S4 AND S6
S19
            8
                S18 AND S8
                S19 NOT (S7 OR S14 OR S17)
S20
            6
S21
            8
                S1 AND S8 AND S3:S4 AND S6
S22
           4
                S5 AND S6
S23
           11
                S21:S22
S24
           3
                S23 NOT (S7 OR S14 OR S17 OR S20)
S25
        98737 (SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT? OR
IN-
             TELLIGENT?) (2N) (REPAIR? OR FIX OR FIXE? ? OR FIXING OR
PATCH?
             OR RESTOR? OR CORRECT? OR DEBUG? OR DE()BUG? ? OR RESTOR?
OR -
             REBUIL? OR ADJUST? OR MODIF?)
S26
          120 S1 AND (SELFTEST? OR SELF()TEST??? OR SELFCHECK? OR
SELF()-
            CHECK?) (2N) CONTROLLER?
S27
           12
                S26 AND S25
S28
                S27 NOT (S7 OR S14 OR S17 OR S20:S24)
           11
                S3:S4 AND S8 AND S25 AND S6
S29
                S29 NOT (S7 OR S14 OR S17 OR S20:S24 OR S27:S28)
S30
S31
            4
                S1 AND S8 AND S25 AND S6
S32
                S30:S31
            7
                S32 NOT (S7 OR S14 OR S17 OR S20:S24 OR S27:S28)
S33
File 350:Derwent WPIX 1963-2008/UD=200807
         (c) 2008 The Thomson Corporation
File 347: JAPIO Dec 1976-2007/Sep (Updated 080116)
         (c) 2008 JPO & JAPIO
```

Set Items Description S1 203100 (INTEGRAT?()CIRCUIT? OR ICCHIP? OR (MICROPROCESSOR? OR MIC-RO OR IC OR COMPUTER? OR SEMICONDUCTOR?) () CHIP? ? OR CIRCUIT? OR IC OR CHIP? ?) (3N) (DEVICE? OR MECHANISM? OR UNIT? ? OR CAR-D? ? OR CONTROLLER? OR APPARAT? OR ADAPTER? OR MODULE?) S2 109037 (SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT? OR IN-TELLIGENT?) (3N) (MONITOR? OR REGULAT? OR TEST??? OR CHECK? OR -DIAGNOS? OR DETERMIN? OR ASSESS? OR DETECT?) S3 . 93745 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS? OR DISCOVER?) (5N) (DEGRAD? OR WEAK??? OR WEAKEN? OR DECAY? OR CORROD? OR IMPAIR? OR FAIL??? OR DETERIOR? OR DISINTEGRAT? OR WEAR???(1W) TEAR???) S4 172089 (MONITOR? OR INSPECT? OR DETECT? OR CHECK? OR RECOGN? OR A-NALY? OR DETERMIN? OR IDENT? OR DIAGNOS? OR COMPAR? OR ASSESS? OR DISCOVER?) (5N) (DEGRAD? OR WEAK OR WEAKEN? OR DECREAS? OR -DECREMEN? OR LESSEN? OR LOWER? OR WORSE? OR SLOWER?) (SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT? OR S5 81859 IN-TELLIGENT? OR R) (2N) (REPAIR? OR FIX OR FIXE? ? OR FIXING OR P-ATCH? OR RESTOR? OR CORRECT? OR DEBUG? OR DE()BUG? ? OR RESTO-R? OR REBUIL? OR ADJUST? OR MODIF?) S6 135236 (ACCEPTAB? OR REASONAB? OR SATISFACTOR? OR ADMISSAB? OR SSAB? OR PASS??? OR TOLER? OR ADEOUAT? OR SUFFICIENT?) (5N) (TH-RESHOLD? OR THRESHHOLD? OR BORDER? OR BOUNDAR??? OR LIMIT? OR RANG???) S7 22877 (SELF OR ITSELF OR DYNAMIC? OR AUTOMATIC? OR INTUIT? OR IN-TELLIGENT?) (2N) (MONITOR? OR REGULAT? OR TEST??? OR CHECK? OR -DIAGNOS? OR DETERMIN? OR ASSESS? OR DETECT?) (3N) (DEVICE? OR M-ECHANISM? OR UNIT? ? OR CARD? ? OR CONTROLLER? OR APPARAT? OR ADAPTER? OR MODULE?) S8 5422 S7(5N)(AFFIX? OR EMBED? OR CONNECT? OR LINK??? OR ATTACH? -OR LOCAT? OR POSIT? OR HAS OR CONTAIN? OR INCLU?) S 9 S1 (100N) S7:S8 (100N) S2 (100N) S3:S4 (100N) S5 (100N) S6

S7:S8(100N)S2(100N)S3:S4(100N)S5(100N)S6

S10

```
S11
          8
                S9:S10
S12
          442
                S1(100N)S8
S13
          256
                S12 AND (INTEGRAT?()CIRCUIT? OR IC)
S14
          256
                S13(100N)S7:S8
S15
          256
                S14(100N)S8
S16
                S15(100N)S5
          15
S17
           12
                S16 NOT S9:S11
           18
S18
                S2(100N)S3:S4(100N)S5(100N)S6
S19
          12
               S18 NOT (S11 OR S17)
File 348:EUROPEAN PATENTS 1978-2007/ 200804
         (c) 2008 European Patent Office
File 349:PCT FULLTEXT 1979-2008/UB=20080117UT=20080110
```

(c) 2008 WIPO/Thomson